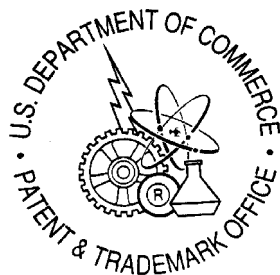


TAF PROFILE REPORT

U.S. (FEDERAL) GOVERNMENT PATENTING

1/1977 - 12/1999



April 2000
U.S. PATENT AND TRADEMARK OFFICE
OFFICE FOR PATENT AND TRADEMARK INFORMATION / TAF PROGRAM
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A TECHNOLOGY ASSESSMENT AND FORECAST REPORT

TAF Profile Report 1/1977 - 12/1999 Explanation of Data

This Technology Assessment and Forecast (TAF) report profiles patent activity for all U.S. patent documents (design, plant, reissue, and utility patents, defensive publications, and statutory invention registrations) granted between January 1, 1977 and December 31, 1999 for which ownership was assigned to a Federal organization at the time of grant. The source of the data used for this report is the TAF data base maintained by the Office of Patent and Trademark Information.

Data Distribution By Date of Grant and By Date of Application

Parts A1 and A2

Part A1 distributes patent GRANT data by year of patent grant ("Patents Granted By Date of Patent Grant"). Part A2 distributes grant data by the year in which the patented application was filed ("Patents Granted By Date of Patent Application"). Parts A1 and A2 each provide patent counts (pages A1-1 and A2-1) and percent distributions (pages A1-2 and A2-2).

Patent data in the "Pre 1986" column corresponds to the period January 1, 1977 through December 31, 1985.

Part B

Part B of this report distributes patent GRANT data for organizations that have received U.S. patents since 1977. Data are presented by the year in which the patent was granted ("Patents By Year of Grant") and the year the patented application was filed ("Patents by Year of Application").

DATA FOR THOSE APPLICATIONS WHICH WERE FILED BUT NEVER ISSUED (ROUGHLY 40% OF TOTAL FILINGS) ARE NOT INCLUDED IN THIS REPORT.

Since the average time period between filing for a patent and the issuing of the patent (i.e., a patent's "pendency") is now about 24 months, the patented application data for the most recent years are incomplete.* This is because a significant number of the applications filed in the most recent years, which will ultimately become patents, were still pending in **December 1999**. Since they had not yet become patents at the time this report was prepared, they were not included in this report.

Patented application data are of significant value since the date an application was filed more accurately reflects when the technology was developed. Additionally, fluctuations in data based on application date are much more likely to reflect changes in technological activity, since such fluctuations would for the most part be immune from changes in PTO processing such as occurred in 1986 when the PTO issued fewer patents than would

normally have been expected due to a lack of funds to print patents. Note that a patent's "pendency" can be quite variable from one patent to another thereby affecting the date of patent grant. Such variation in pendency is determined by many factors, including PTO workload (which varies between technologies), budget and manpower levels, patent printing schedules, etc.

Parts of the Report

Parts A1 and A2 present tables which show, by number and percent, the patent activity. Part A1 presents data by year of patent grant ("Patents Granted by Date of Patent Grant"). Part A2 redistributes grant data by year of patent application ("Patents Granted by Date of Patent Application"). The location of patent origin is determined by the residence of the first-named inventor at the time of grant.

Information on **patent ownership** reflects ownership at the time of patent grant and does not include subsequent changes in ownership. If more than one assignee was declared at the time of grant, the patent is attributed to the first-named assignee. The U.S. and Foreign Corporations ownership categories count predominantly corporate patents; however, patents assigned to other organizations such as small businesses, nonprofit organizations, universities, etc. are also included in this category. While U.S. Government patent ownership includes only patents granted to the Federal Government, no such distinction is made for Foreign Government patents.

Part B is a ranked listing of Federal organizations which have received 1 or more U.S. patents since 1977. Information on patent ownership reflects ownership at the time of patent grant (see explanation for Parts A1 and A2, above). Although a substantial effort has been made to combine name variations into a single organizational name, many organizations continue to have patents listed under more than one organizational name.

* As of December 31, 1999, UTILITY patent application data (most issued patent documents are utility patents) were approximately 79% complete for patent applications filed in 1997, and 21% complete for applications filed in 1998. They are essentially complete for applications filed prior to 1997.

Part A1

Patent Grants as Distributed By Year of Patent Grant

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Part A2

Patent Grants as Distributed By Year of Patent Application

Page A2- 1

Foreign Corporations	0
Foreign Government	0
Foreign Individuals	0

Page A2- 2

Foreign Individuals	0
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Part B

Ranked Listing of Organizations with Patent Grants
As Distributed By Year of Patent Grant
and As Distributed By Year of Patent Application

---- Technology Assessment and Forecast Report ----

U.S. FEDERAL GOVERNMENT (UTILITY, DESIGN, PLANT, REISSUE PATENTS, STATUTORY INVENTION REGISTRATIONS, DEFENSIVE PUBLICATIONS)

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---- Organizational Patenting

(Granted: Jan 01, 1977 - Dec 31, 1999) ---- Ranked List of Organizations with 1 or More Patents ----

	Pre															
	1986	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL
UNITED STATES OF AMERICA, NAVY																
Patents By Year of Grant:	3013	233	206	126	145	276	396	314	360	395	347	294	299	345	358	7107
Patents By Year of Application:	3791	119	108	173	214	368	331	363	353	304	329	304	271	75	4	7107
UNITED STATES OF AMERICA, ARMY																
Patents By Year of Grant:	2073	256	254	152	200	170	201	168	184	203	191	155	170	166	142	4685
Patents By Year of Application:	2528	193	144	157	197	171	172	214	205	185	191	169	117	42	0	4685
UNITED STATES OF AMERICA, DEPARTMENT OF ENERGY																
Patents By Year of Grant:	1962	258	253	240	233	240	215	250	182	205	119	71	69	62	53	4412
Patents By Year of Application:	2476	223	187	216	247	229	227	177	165	78	69	62	44	12	0	4412
UNITED STATES OF AMERICA, AIR FORCE																
Patents By Year of Grant:	1241	187	204	136	157	114	149	145	139	138	86	104	94	84	91	3069
Patents By Year of Application:	1621	162	131	133	114	154	135	131	111	97	101	87	66	25	1	3069
UNITED STATES OF AMERICA, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION																
Patents By Year of Grant:	921	93	122	93	127	128	151	151	166	160	122	104	97	95	93	2623
Patents By Year of Application:	1110	93	96	145	139	137	170	159	167	123	108	87	77	11	1	2623
UNITED STATES OF AMERICA, HEALTH & HUMAN SERVICES																
Patents By Year of Grant:	243	28	34	27	34	38	50	76	85	108	97	117	150	169	139	1395
Patents By Year of Application:	314	34	37	56	67	81	92	124	121	169	185	56	55	4	0	1395
UNITED STATES OF AMERICA, DEPARTMENT OF AGRICULTURE																
Patents By Year of Grant:	493	34	30	35	43	49	47	55	54	38	49	41	49	75	71	1163
Patents By Year of Application:	558	34	39	44	58	57	58	38	45	47	64	63	46	11	1	1163
UNITED STATES OF AMERICA, DEPARTMENT OF THE INTERIOR																
Patents By Year of Grant:	288	13	11	10	10	8	18	20	10	10	14	17	6	3	5	443
Patents By Year of Application:	308	11	11	7	12	20	16	9	12	18	10	3	5	0	1	443
UNITED STATES OF AMERICA, DEPARTMENT OF COMMERCE																
Patents By Year of Grant:	57	7	13	10	5	18	8	18	27	34	26	23	18	15	20	299
Patents By Year of Application:	71	10	10	11	16	15	22	42	30	24	22	12	12	2	0	299
UNITED STATES OF AMERICA																
Patents By Year of Grant:	66	13	6	7	8	7	16	18	8	5	14	16	9	8	8	209
Patents By Year of Application:	90	4	4	13	17	17	7	9	13	9	19	1	5	1	0	209
UNITED STATES OF AMERICA, TENNESSEE VALLEY AUTHORITY																
Patents By Year of Grant:	63	13	6	8	6	9	10	5	1	4	8	3	3	3	7	149
Patents By Year of Application:	77	6	10	8	11	6	3	2	8	3	4	5	4	2	0	149

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----- Organizational Patenting ----- (Granted: Jan 01, 1977 - Dec 31, 1999) ----- Ranked List of Organizations with 1 or More Patents -----

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